

30. A method according to claim 26 wherein said other one of the electrodes is provided with a plurality of ports for introducing said cleaning gas into the reaction chamber.--

REMARKS

The Office Action of August 5, 1999 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Filed concurrently herewith is a *Request for a Two Month Extension of Time* which extends the shortened statutory period of response to January 5, 2000. Accordingly, Applicants respectfully submit that this response is being timely filed.

Claims 13-17, 19 and 20 were pending prior to the instant amendment. By this amendment, claims 13, 16, 17 and 20 are amended and new claims 21-30 are added to recite additional features of the present invention to which Applicants are entitled. Consequently, claims 13-17 and 19-30 are currently pending in the instant application.

Initially, with respect to the rejection under 35 U.S.C. 112, first paragraph, the Examiner contends that the claims should include a limitation that the first film is formed by a photo CVD. Although the specification teaches that it is desirable to use a photo CVD for forming a first film in order to avoid a plasma damage, the specification never teaches that it is not possible to use a plasma CVD for forming a first film.

In order to make a rejection based on 35 U.S.C. §112, first paragraph, the

, 1513 (Fed. Cir. 1993) (The Examiner must provide a reasonable explanation as to

why the scope of protection provided by a claim is not adequately enabled by the disclosure). See, also, M.P.E.P. §2164.04. Further, to establish a reasonable basis for questioning the adequacy of a disclosure, the Patent Office must present a factual analysis of the disclosure to show that a person skilled in the art would not be able to make and use the claimed invention without resorting to undue experimentation. See, M.P.E.P. §2106.02.

It is respectfully submitted that neither of these two requirements have been met in the Office Action, since the Office Action merely contends that the photo-CVD to deposit the first protective layer is "essential" to the present invention. It should be noted that the present invention set forth in the subject specification includes numerous aspects set forth in general on pages 6-9. The claimed subject matter of claims 13-17 and 19-20 is indeed enabled within the meaning of 35 U.S.C. §112, first paragraph, in the remainder of the specification beginning on page 9 wherein the recited method is disclosed. Nothing in the specification appears to limit the first deposition only to photo CVD. As a result, this rejection should be reconsidered and withdrawn.

Also, claims 16 and 17 are rejected as the specification allegedly does not support the formation of a phosphate or a boronsilicate glass film onto a SiO_2 film. The original specification teaches that it is possible to form an insulating layer member which has two insulating or protecting layers of different materials selected from a group consisting of, for example, Si_3N_4 , SiO_2 , phosphate glass, borosilicate glass, and aluminum nitride (See, page 23 of the specification). Although the specification does not teach the specific order of these layers, Applicants contend

Referring to the prior art rejections, claims 13, 14, 19 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Foster et al., in view of Sherman and Coleman. This rejection is traversed for the reasons advanced below.

Basically, the combination of references relied upon by the Examiner still fails to teach providing a pair of electrodes wherein one electrode supports a substrate and the other electrode introduces both a film forming gas and a cleaning gas. Foster et al. is cited in the Office Action for disclosing the formation of nitride and PSG films, as recited in the claims. While the Examiner admits that Foster et al. does not teach to introduce gases through electrodes, the Examiner relies upon Sherman (Figure 5, item 36) or Coleman (Figure 3) for this feature.

It should be noted, however, that Foster et al. and Coleman fail to teach the introduction of cleaning gas through an electrode. In fact, these references fail to teach at step of cleaning the chamber at all. Moreover, although Sherman teaches the insitu cleaning of a chamber, Sherman fails to teach the claimed feature that a pair of electrodes are opposed to each other wherein one of the electrodes functions as a substrate holder while both of a film forming gas and a cleaning gas are introduced through the other electrode. That is, Sherman teaches that the gas manifold section (which functions as an electrode) 25A is connected, as by line 47, to the deposition gas supply system and line 48 brings in the etching gas such as Freon (column 7, lines 25-30).

As a result, the references still fail to teach the presently claimed invention of providing a pair of electrodes opposed to each other wherein one of the electrodes functions as a substrate holder while both of a film forming gas and a

Consequently, not only do the references fail to teach all of the recited features of

the present invention by failing to teach the above features of the opposed electrodes, but there is also no suggestion in Foster et al. to combine the teachings of the secondary references therewith. Only by stretching the disclosures of the secondary references beyond their reasonable interpretation and engaging in hindsight reconstruction can this rejection be completed.

The Federal Circuit has clearly held that the burden of establishing a *prima facie* case of obviousness lies with the Patent Office. A *prima facie* case of obviousness is established when there is both (1) structural similarity between claimed invention and prior art subject matter and (2) where the prior art gives reason or motivation to make the claimed invention or to combine references to achieve the claimed invention. *In re Dillon*, 16 U.S.P.Q.2d 1897 (1990). The rejection fails to establish structural similarity without engaging in hindsight reconstruction because none of the cited references alone or in combination show the pair of electrodes of the present invention where one of the pair is used to introduce both film forming gas and cleaning gas. Further, the prior art does not give sufficient motivation to combine the teachings of the primary reference with the teachings of the secondary references, since the primary reference is limited only to the type of deposited film in a chamber. Therefore, this rejection should be reconsidered and withdrawn.

Claims 13-17 and 19-20 are also rejected under the judicially created doctrine of obviousness type double patenting over claims 1-6 of U.S. Patent No. 4,950,624, claims 1-11 of U.S. Patent No. 5,629,245, claims 7-16 of U.S. Patent No. 5,512,102 or claims 14-15 of U.S. Patent No. 4,857,139 in view of Sherman,

New claims 21-30 are added to recite additional features of the present invention to which Applicants are entitled, of which claims 21 and 26 are independent. Since claims 21 and 26 include the above noted electrode feature of the present invention, these claims should likewise be considered allowable.

With regard to the statement in the Office Action on page 4 regarding the prior filed *Information Disclosure Statements* of 3/16/99 and 9/4/97, Applicants have a number of questions and concerns. First of all, with respect to the Japanese references filed with the *Information Disclosure Statement* of 3/16/99, Applicant provided full English translations of these patents for consideration by the Examiner. A concise explanation of the relevance noted by the Examiner in 37 C.F.R. 1.98(a)(3) is required only for non-English language references. Since full translations were provided, this rule is not applicable. Therefore, it is requested that these translation be considered by the Examiner and that the Examiner evidence consideration of the translations by providing a copy of the Form PTO-1449 including his initials without being marked through with the next communication from the Patent Office.

With regard to the remaining foreign references that are marked through and that do not include the Examiner's initials, Applicants are filing additional copies of these references with Abstracts for the Examiner's consideration simultaneously herewith. By providing Abstracts therewith, these references should be considered, since submission of an English language abstract of the reference may fulfill the requirement for a concise explanation. (See, M.P.E.P. §609A(3))

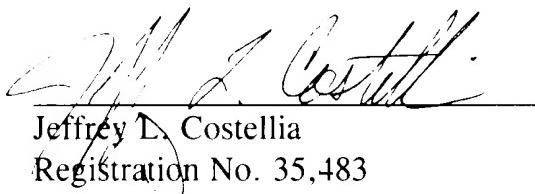
Finally, Applicants also note that some of the references provided on pages

appears that the words "Bad Date" are included with these references. Applicants

request that the Examiner confirm that all references including initials were properly considered and will be included on the face of any patent issuing for the instant application, despite the apparent markings thereon.

In view of the foregoing, it is respectfully requested that the rejections of record be reconsidered and withdrawn by the Examiner, that claims 13-17, 19 and 20 be allowed, that new claims 21-30 be allowed and that the application be passed to issue. If a conference would expedite prosecution of the instant application, the Examiner is hereby invited to telephone the undersigned to arrange such a conference.

Respectfully submitted,



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